

## Remarks

Claims 1, 3, 7, 8, 12, 13 and 25 stand rejected under 35 USC 103(a) as being unpatentable over US '642 due to Lalikos. Claims 10, 11, 16 and 21 through 24 stand rejected under 35 USC 103(a) as being unpatentable over Lalikos et. al. in view of US patent '722 due to Dahn. The Examiner has also responded to the arguments submitted by the Applicant on August 16<sup>th</sup>, 2004, wherein the Applicant argued that Lalikos et. al. do not disclose a bent pipe element. The Examiner has disagreed pointing out a paragraph in the Lalikos reference in which Lalikos cites mechanical vibrations in the flexible metal conduit which can be on the order of one inch in magnitude and in three planes. The Examiner therefore points out that Lalikos inherently describes a bent pipe element since the pipe bends in a transverse sense during the course of these vibrations and therefore meets the claim limitation.

In responding to these rejections, the Applicant has amended independent claims 1 and 25 to specify that the pipe element has a bending angle  $\alpha$  which is always less than 140 degrees. Referring to column 3 lines 1 through 19 of Lalikos, Lalikos discloses offset movements of one inch along restricted pipe lengths as short as 7 inches or less (see lines 15, 16, column 3 of Lalikos). If one assumes that a pipe element has a length of 6 inches and a transverse offset of one inch, then the bending angle  $\alpha$  as defined in the instant specification assumes a value of approximately  $\alpha = 2 \tan^{-1} 3 = 143^\circ$ . Moreover, this angle changes with time as the vibrations proceed and assumes values between 180 degrees and  $143^\circ$  degrees on a periodic basis. Therefore, disclaimer of the region of angles between 140 degrees and 180 degrees in amended claims 1 and 25 provides a limitation not suggested by the Lalikos reference. Moreover, by

specifying that the angle  $\alpha$  is always less than  $140^\circ$ , the claim language excludes the possibility of vibrations moving within the region disclosed by Lalikos.

As pointed out in the previous Office Action, the limitations of the invention as now claimed are directed towards providing a geometry for the undulations which is conducive to small bending angles. By explicitly including the bending angle limitation in the amended claims, an accidental reading of the independent claims on the Lalikos reference is obviated. The Applicant would like to point out that the limitation of  $\alpha < 140^\circ$  does not represent new matter, since Fig. 1 and the associated discussion in the specification clearly point out that the invention is intended to provide for bending angles  $\alpha$  which are less than 90 degrees (see Fig. 1). Therefore the claim language merely constitutes a disclaimer for the angular region between 140 degrees and 180 degrees.

The Applicant requests entry of amendment since this amendment does not require new search and since it places the application in a position of allowance. Passage to issuance is therefore respectfully requested.

No new matter has been added in this amendment.

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Respectfully submitted,

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